

## **Resource Management**

Agency coordination and current knowledge of system resources is essential to maintain a coordinated response and appropriate resource utilization within an effective EMS system. A data collection system is in place that can properly monitor the utilization of agency resources; data is available for timely determination of the quantity, quality, and utilization of resources.

The agency is adequately staffed to carry out coordination of responses and activities. Agency management requests technical assistance both proactively and as needed. The agency receives coordinated and ongoing support at the local, regional and state levels, obtaining both technical expertise and financial support. There is a formal program to recruit and retain EMS personnel, including volunteers. A system of critical incident stress management is utilized.

## **Education and Training**

EMS personnel can perform their mission only if adequately trained and available in sufficient numbers within their agency. The agency has a mechanism to assess current manpower needs and establish a comprehensive plan for stable and consistent EMS training programs with effective local, regional, and state support.

The competency of all out-of-hospital emergency medical care personnel is assured on an ongoing basis. Agency management provides quality leadership through participation in management courses. The agency management, in conjunction with state and institutional support, assures that EMS personnel have access to specialty courses covering topics such as trauma life support, cardiac care and pediatric patients. Personnel maintain a working knowledge of the Critical Access Hospital designation and its potential impact on the EMS system.

## **Transportation**

Safe, reliable ambulance transportation is a critical component of an effective EMS system. The transportation component of the local EMS plan includes provisions for uniform coverage, including a protocol for air medical dispatch, rendezvous and a mutual aid plan.

This plan is based on an ongoing, formal assessment of transportation resources, including the placement and deployment of all out-of-hospital emergency medical care transport services. There is an identified ambulance placement or response unit strategy, based on patient need and optimal response times. The agency has a mechanism for modification, upgrades or improvements based on changes in the environment (i.e. population density).

The agency maintains emergency vehicles in a constant state of readiness through routine maintenance, inspections and inventory control. The agency assures emergency vehicle operator competency.

## **Funding and Policy**

To provide a quality, effective system of emergency medical care, each EMS agency must have in place a consistent, established funding source to adequately support the activities of the agency. This agency has the authority to plan and implement an effective EMS system,

abiding by state and local rules and regulations for each recognized component of the EMS system (certification, licensure, standardized treatment, transport, communication and evaluation, services and establishment of medical control).

There is a consistent, established funding source to adequately support the activities of the agency and other essential resources which are necessary to carry out the duties as determined by local authority. The agency operates under a clear management structure with standard operating procedures. The public has a well-defined, easily accessible mechanism for identifying and commenting on policy governing the EMS system.

The role of any local/regional EMS agencies or councils who are charged with implementing EMS policies is clearly established, as well as the relationship between agencies. Supportive management elements for planning and developing an effective EMS system include the presence of a formal EMS Medical Director, and an EMS Advisory Committee or equivalent for review of EMS medical care issues. The EMS Advisory Committee has a clear mission, specified authority and representative membership from all disciplines involved in the implementation of EMS systems.

## **Facilities**

It is imperative that the seriously ill or injured patient is delivered in a timely manner to the closest appropriate facility. The agency participates in a formal system of identifying the functional capabilities of all health care facilities that receive patients from the out-of-hospital emergency medical care setting.

This determination is free of political considerations, updated on a regular basis and includes stabilization and definitive care. The agency makes determinations about patient destination in accordance with clinical protocols that address patient conditions of all types, including patients requiring specialty care (such as severe trauma, burns, spinal cord injuries and pediatric emergencies), and when necessary, on-line medical direction.

All facilities to which the agency might transport proactively notify transport organizations or their communications centers when diversion is necessary. Hospital staff routinely participate in telecommunications with prehospital care providers and other hospitals when requested to facilitate patient care information and destination determinations.

The health care facility assists with logistical support of the EMS system and provides feedback to the agency Medical Director regarding the patient care provided by the transporting agency. EMS providers maintain an understanding of the capabilities of area healthcare facilities.

## **Communication**

A reliable communication system is an essential component of an EMS system. The agency is responsible for utilizing a communication system that is compatible with their local dispatch agency and area hospitals.

There is a common statewide radio system that allows for direct communication between all providers and facilities to ensure that receiving facilities are ready and able to accept patients and maintain patient and provider safety. Consultation with specialty and definitive care facilities is readily available. Minimum standards for dispatch centers are established,

including protocols to ensure uniform dispatch and standards for dispatcher training and certification.

The center provides certified Emergency Medical Dispatchers (EMD) with a system of priority dispatch. There is an established mechanism for monitoring the quality of the communication system, including the age and reliability of the equipment.

### **Public Information, Education and Prevention**

To effectively serve the public, each agency must develop and implement an EMS public information and education program. Consistent, structured programs are in place to enhance the public's knowledge of the EMS system, appropriate EMS system access, bystander care actions and injury prevention.

The EMS system actively supports programs that are directed at both the general public and EMS providers. The agency enlists the cooperation of other public service agencies, with local and state support, in the development and distribution of these programs, and serves as an advocate for change that results in injury/illness prevention.

### **Medical Direction**

Physician oversight is critical to all aspects of the EMS system, including the dispatch center, that provides patient care outside the traditional confines of a clinic or hospital. The role of the agency Medical Director is clearly defined, with legislative authority and responsibility for EMS system standards, protocols and evaluation of patient care.

Physicians are consistently involved and provide leadership at all levels of quality improvement programs. Medical Directors receive feedback from the healthcare facility regarding the patient care provided by the EMS agency and utilize the information as a quality improvement tool. Medical Directors are responsible for maintaining policies and procedures incorporating standard treatment protocols. Medical Directors are knowledgeable in EMS system design and development.

All physicians providing on-line medical direction have comprehensive knowledge about the local EMS system. The availability of on-line medical direction is assured by the agency on a formal basis.

### **System Integration**

The delivery of quality patient care requires that EMS components are clearly integrated with the overall health care system. Under the authority of the Medical Director, development and implementation of integration efforts includes triage/transfer guidelines and destination determination for patients based on age and presenting condition, data collection, and quality improvement methods for optimal care.

These guidelines and protocols are developed through a multiagency, multidisciplinary consensus driven process. Information and trends from data collection should be reflected in community public education and injury prevention programs. Collaboration and planning among all area agencies and institutions with an interest in enhancing the health care system result in coordination of resources on behalf of all participants.

Safe, effective and timely inter-facility transports occur as a result of interagency communications and coordination procedures.

### **Quality Improvement**

A comprehensive improvement program is needed to effectively plan, implement and monitor the EMS system. The agency is responsible for evaluating the effectiveness of services provided to victims of medical or trauma related emergencies; therefore the EMS agency should be able to state definitively what impact has been made on the patients served by the system.

A data collection system (i.e., State EMS report or equivalent) exists that captures the minimum data necessary to measure compliance with standards and this data is regularly provided to State EMS. Pre-established standards, criteria and outcome parameters are used to evaluate resource utilization, scope of services, effectiveness of policies and procedures, and patient outcome.

A comprehensive, medically directed quality improvement program is established to assess and evaluate patient care, including a review process (how EMS system components are functioning) and outcome. The quality improvement program should include an assessment of how the system is currently functioning according to the performance standards, identification of system improvements that are needed to exceed the standards and a mechanism to measure the impact of the improvements once implemented.

Medical directors participate in a formal evaluation process with the health care facility to discuss the patient care provided by the EMS agency. This information is provided to the agency as part of an ongoing quality improvement program.

Patient data is collected and integrated with available emergency department and trauma system data; optimally there is linkage to databases outside of EMS (such as crash reports, trauma registry, medical examiner reports and discharge data) to fully evaluate quality of care.

The evaluation process is educational and quality improvement/system evaluation findings are disseminated to agency providers. The agency assures that all quality improvement activities have confidentiality protection and are non-discoverable.